

## NOTE ON THE GENUS *CITROGRAMMA* VOCKEROTH FROM CHINA (DIPTERA, SYRPHIDAE)

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**Abstract** This paper recorded 11 species of the genus *Citrogramma* Vockeroth, 1969 from China, including one new species: *Citrogramma xizangensis* sp. nov., *C. amarilla* Mengual, *C. arisanicum* (Shiraki), *C. citrinoides* Wyatt, *C. citrinum* (Brunetti), *C. clarum* (Hervé-Bazin), *C. curranii* Ghorpadé, *C. fumipenne* (Matsumura), *C. gedehatum* (de Meijere), *C. matsumurai* Mengual and *C. shirakii* Mengual. The studied specimens are preserved in the Museum of Animal and Botany, Shaanxi University of Technology.

**Key words** Diptera, Syrphidae, *Citrogramma*, new species, China.

The flower fly genus *Citrogramma* Vockeroth is mostly distributed in the Oriental and Australian Regions. In 1969, Vockeroth erected the genus *Citrogramma* based on the species *Syrphus hervebazini* Curran, 1928, described 4 new species and simultaneously transferred the following species into his new genus: *Olbiosyrphus clarus* Herve-Bazin, *Xanthogramma citrinum* Brunetti, *Syrphus difficilis* Curran, *S. hervebazini* Curran and *S. variscutatus* Curran. Knutson *et al.* (1975) listed 9 species of *Citrogramma* from the Oriental Region, including 4 new combinations: *C. circumdatus* (Meijere), *C. fascipleura* (Curran), *C. gedehatum* (Meijere) and *C. pendleburyi* (Curran). Thompson and Vockeroth (1989) described 5 species from Papua New Guinea and one species from Australia and placed *Syrphus luteifrons* Meijere in *Citrogramma*. Wyatt (1991) described 5 new species of *Citrogramma* and mentioned 4 unidentified species from the Oriental Region. Ghorpadé (1994) described 2 new species from India.

Mengual (2012) systematically summarized the study history and offered the diagnostic characters of *Citrogramma*: mesonotum black with yellow lateral margins and brown or olivaceous pollinosity medially; metasternum hairy (except for *C. quadricornutum*); abdomen margined; scutellum simple with subscutellar fringe. 41 species of the genus were recorded, including 18 new species, 2 new combinations: *C. arisanicum* (Shiraki) and *C. fumipenne* (Matsumura), and one new synonym: *X. fasciatum* Shiraki, 1930 (= *C. clarum* (Hervé-Bazin, 1923)).

Chen (1940) recorded *Xanthogramma citrinum* Brunetti, 1923 (= *C. citrinum*) from Fujian, Nanping. Subsequently the species was recorded from

Fujian (Nanping) (Zhao, 1982; She, 1989), Yunnan (Liude, Yongsheng) (Sun, 1992), Yunnan and Sichuan (Yang *et al.*, 1998), but the authors have not found the reference to specific distribution of the species in Sichuan. Mengual (2012) studied the species of *Xanthogramma* Keiser of Taiwan and transferred the following species into the genus *Citrogramma*: *Xanthogramma arisanicum* Shiraki, *X. fasciatum* Shiraki and *X. fumipenne* Matsumura. He re-examined the specimens Shiraki supplemented for *X. fumipenne* Matsumura. He found that some of the specimens were not the real species *X. fumipenne* Matsumura and erected 2 new species based on those specimens: *C. matsumurai* Mengual and *C. shirakii* Mengual.

The authors identified the specimens of the genus *Citrogramma* from Hainan and Tibet and the identification had been affirmed by Dr. X. Mengual (Department of Entomology National Museum of Natural History, Smithsonian Institution). There were 7 identified species of *Citrogramma* including one new species. The studied specimens are preserved in the Museum of Animal and Botany, Shaanxi University of Technology. So far, there are 11 *Citrogramma* species recorded from mainland and Taiwan of China.

### 1 Species of the Genus *Citrogramma* of China

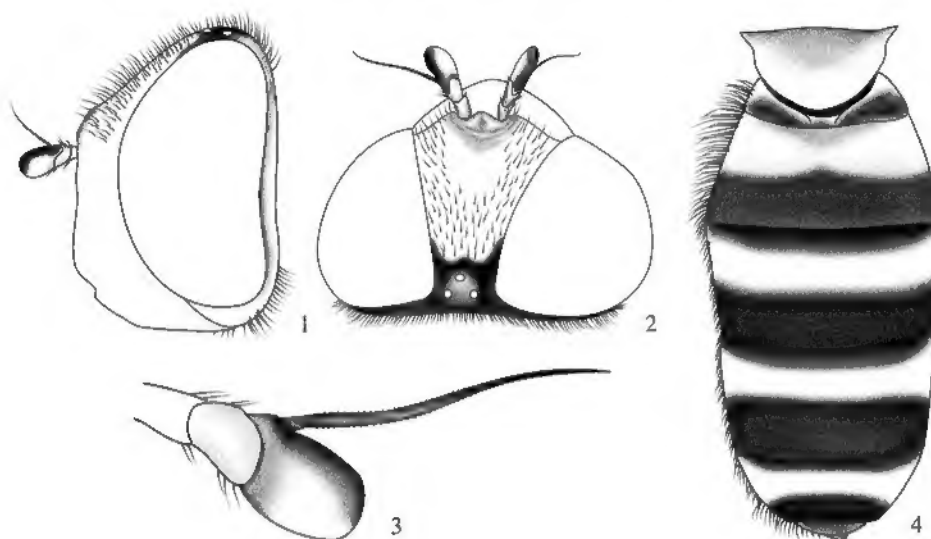
#### 1.1 *Citrogramma amarilla* Mengual (Figs 1–4)

*Citrogramma amarilla* Mengual, 2012: 106. Type locality: India, Tamil Nadu, Anaimalai Hills, Kadamparai.

**Diagnosis.** Compound eye bare. Frons yellow, black pilose. Vertex and ocellar triangle black, black pilose. Face yellow, yellow pilose laterally. Arista short pilose. Mesonotum black with broad yellow margins laterally and dark blue vitta medially. Hairs

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Figs 1 – 4. *Citrogramma amarilla* Mengual, 2012, female. 1. Lateral view of head. 2. Dorsal view of head. 3. Inside of antenna. 4. Dorsal view of abdomen.

on mesonotum brown yellow except for black ones on postalar callus ventrally. Scutellum yellow, black pilose, with unlimited triangular brownish macula medially. Pleuron yellow, black pilose, anterior 1/3 of posterior anepisternum slightly brownish. Upper and lower hairy patches on posterior katepisternum almost joined. Meron bare. Metasternum yellow with concolor hairs. Legs yellow, tarsi of fore and mid legs brownish, apical 1/3 of hind femur, tibia and tarsus blackish brown, hind tibia with indistinct yellow ring medially. Wing membrane microtrichose. Abdomen black dorsally. Tergum 1 yellow basally. Tergum 2 with broad yellow band basally, which is longer than half length of tergum medially. Terga 3 – 5 with broad yellow fasciae anteriorly, with almost straight anterior and posterior margins, extending to anterior margins laterally.

Specimens examined. 2 ♀ ♀, Hainan, Wuzhishan City, Shuiman Town, 23 – 25 May 2007, BA Yi-Bin, LANG Jun-Tong.

Distribution. China (Hainan); India, Nepal, Java, Philippines, Thailand, Laos.

### 1.2 *Citrogramma arisanicum* (Shiraki) (Figs 5 – 11)

*Xanthogramma arisanicum* Shiraki, 1930: 405. Type locality: China (Taiwan); Arisan.

*Xanthogramma arisanica* Shiraki, 1930. Knutson *et al.*, 1975: 320.

*Citrogramma arisanicum* (Shiraki, 1930). Mengual, 2012: 128.

Diagnosis. Compound eyes bare, angle of frons under eyes in male about 90°. Frons yellow, black pilose, lunule fawn. Female vertex black, frons yellow, but black anterior to ocellar triangle, extending forward along eye margin, frons and vertex black pilose. Face yellow with blackish brown vitta medially, yellow pilose laterally, except black pilose dorsolaterally. Arista short pilose. Mesonotum black

with broad yellow lateral margins and dark bluish median vitta, hairs brownish yellow dorsally. Scutellum yellow, black pilose, with defined blackish brown triangular macula medially. Pleuron black, except yellow on anterior anepisternum, posterior 2/3 of posterior anepisternum, anterior katepisternum and posterior katepisternum dorsally, anepimeron dorsomedially, katepimeron and notopleuron. Legs yellow, coxae and trochanters of fore and mid legs yellow brown, apical tarsomere dark yellowish brown. Hind leg black, except yellow basal 2/3 of femur. Wing membrane microtrichose. Abdomen ovate-oblong, black dorsally. One pair of yellow triangular maculae on tergum 2 extended to anterior margin of tergum laterally. Yellow bands on terga 3 – 5 present, of which on terga 3 – 4 located on anterior portion of terga and extended to lateral margins. Anterior margin of band on tergum 3 protruded medially, posterior margin straight. Yellow band on tergum 5 close to anterior margin of tergum, with posterior margin triangularly concave distinctly. Female abdomen broad oval, yellow bands on terga 2 – 5 present, narrower and straighter than that in male.

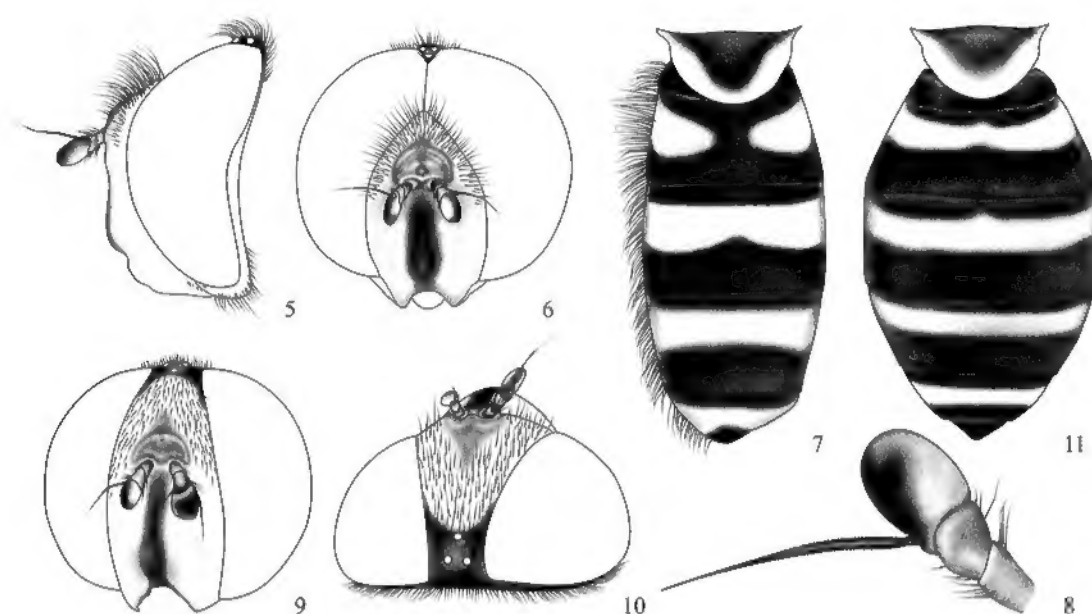
Specimens examined. 1 ♂, 1 ♀, Hainan, Wuzhishan City, Shuiman Town, 23 – 25 May 2007, BA Yi-Bin, LANG Jun-Tong.

Distribution. China (Taiwan, Hainan).

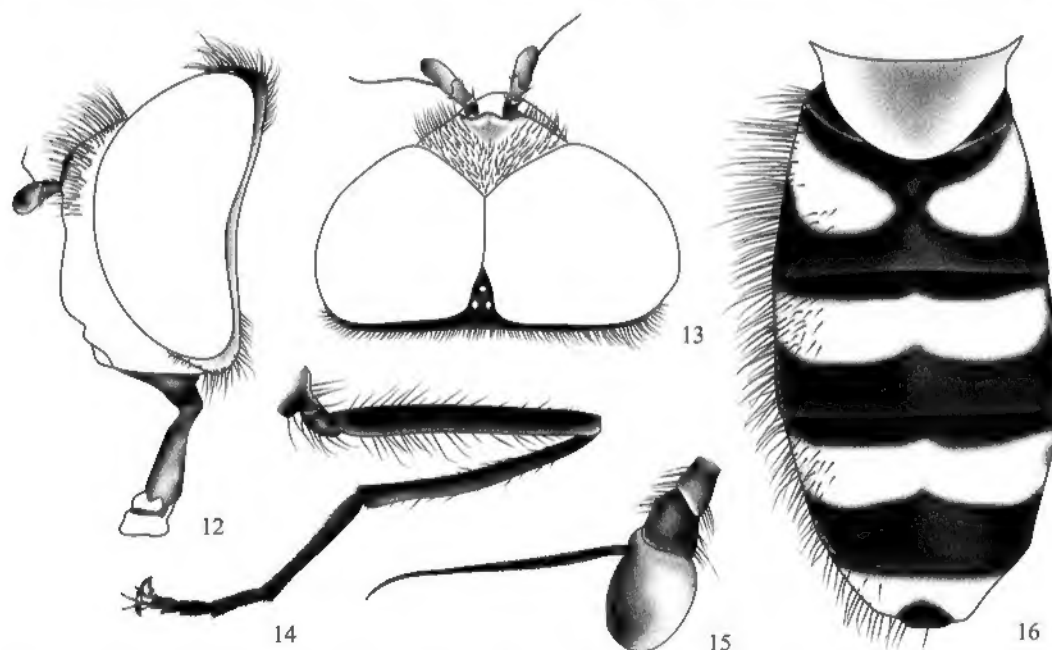
### 1.3 *Citrogramma citrinoides* Wyatt (Figs 12 – 16)

*Citrogramma citrinoides* Wyatt, 1991: 158. Type locality: Malaysia, Mt. Jasar. Mengual, 2012: 134.

Diagnosis. Compound eyes bare, angle of frons under eyes about 90°. Frons yellow, black pilose. Face yellow, yellow pilose laterally, except black pilose dorsolaterally and on eye orbit below. Arista short pilose. Mesonotum black, broad yellow lateral vittae extended from postpronotum to end of postalar



Figs 5 – 11. *Citrogramma arisanicum* (Shiraki, 1930). 5 – 8. Male. 9 – 11. Female. 5. Lateral view of head. 6, 9. Frontal view of head. 7, 11. Dorsal view of abdomen. 8. Inside of antenna. 10. Dorsal view of head.



Figs 12 – 16. *Citrogramma citrinoides* Wyatt, 1991, male. 12. Lateral view of head. 13. Dorsal view of head. 14. Anterior view of hind leg. 15. Antenna. 16. Dorsal view of abdomen.

callus, dark bluish medial vitta present. Hairs on dorsum brown yellow, except for black hairs on sides of medial black portion, posterior portion of dorsum, and yellow hairs on postalar callus ventrally. Scutellum yellow, black pilose, with undefined brownish triangular macula medially. Pleuron black, but yellow on anterior anepisternum, posterior 2/3 of posterior anepisternum, anterior portion and posterodorsal portion of katepisternum, dorso-medial portion of anepimeron, katepimeron and meron. Legs yellow, except black hind leg black, with tarsi blackish brown

to black. Abdomen ovate-oblong, black dorsally. One pair of yellow triangular spots on tergum 2 extended to anterior margin of tergum laterally. Yellow bands on terga 3 – 5 present, bands on terga 3 – 4 located on anterior portion of terga and extended to lateral margins. Anterior margin of band on tergum 3 protruded medially, posterior margin slightly concave. Yellow band on tergum 5 close to anterior margin of tergum, with posterior margin triangularly concave distinctly. Male genitalia black.

Specimens examined. 2 ♂♂, Hainan, Ledong

County, Mt. Jianfeng, 16 Nov. 2006, HUO Ke-Ke.  
Distribution. China (Hainan); Malay Peninsula.

#### 1.4 *Citrogramma citrinum* (Brunetti) (Figs 17 – 20)

*Xanthogramma citrinum* Brunetti, 1923: 95. Type locality: India, Mangaldai. Shiraki, 1930: 405, 408; Keiser, 1958: 193; Nayar and Nayar, 1965: 241; Biswas *et al.*, 1975: 25.

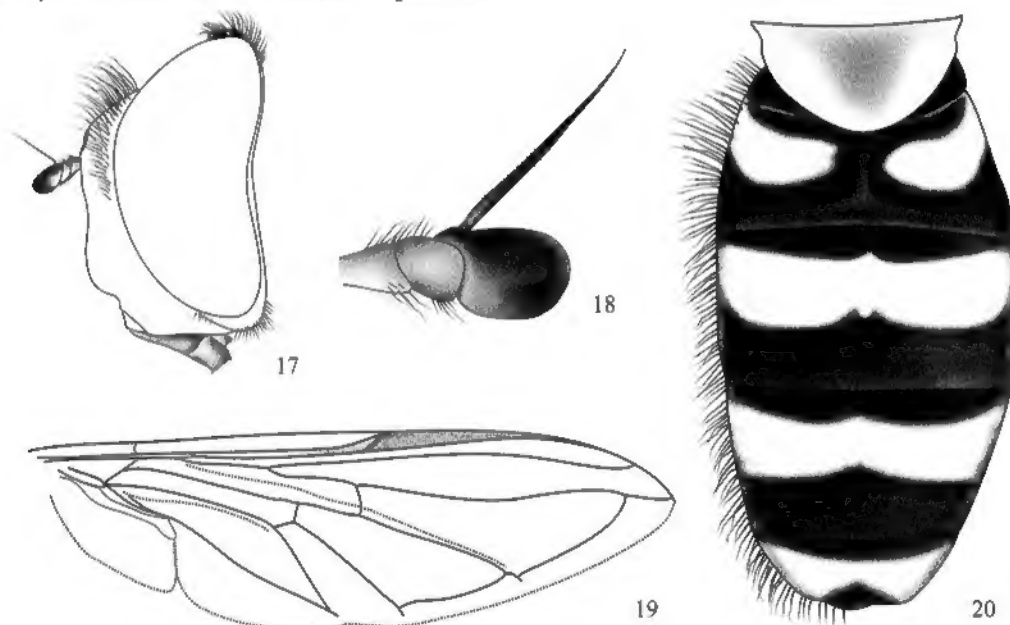
*Olbiosyrphus citrinus* (Brunetti, 1923). Hervé-Bazin, 1923b: 290; Hervé-Bazin, 1926: 67; Frey, 1946: 163.

*Syrphus citrinum* (Brunetti, 1923). Curran, 1928: 198, 214; Curran, 1931a: 313, 319; Curran, 1942: 6.

*Citrogramma citrinum* (Brunetti, 1923). Knutson *et al.*, 1975: 311; Kapoor *et al.*, 1979: 52; Wyatt, 1991: 158, 163; Sun, 1992: 136; Ghorpadé, 1994: 9; Mitra *et al.*, 2008: 3; Yang *et al.*, 1998: 1106; Mengual, 2012: 134.

Diagnosis. Compound eye bare, angle of frons under eyes about 90°. Frons yellow, black pilose. Face yellow, yellow pilose laterally, except black hairs dorsolaterally and on eye orbit below. Arista short pilose. Mesonotum black, yellow broad lateral margins extended from postpronotum to end of postalar callus, broad dark bluish vitta present medially. Hairs on dorsum brownish yellow, intermixed with black hairs posteriorly. Hairs on yellow margins yellow and on the ventral of postalar

callus black. Scutellum yellow, black pilose, undefined brownish triangular macula present medially. Pleuron black, but yellow on anterior anepisternum, posterior 2/3 of posterior anepisternum, anterior portion and posterior-dorsal portion of katepisternum, dorso-medial portion of anepimeron, katepimeron and meron. Legs yellow, with mid coxa yellowish brown, apical end of fore and mid femora slightly tinged with brown dorsally. Hind leg with femur black to blackish brown on apical 1/3 to 1/2, tibia black. Tarsi of legs black brown to black. Wing entirely microtrichose. Abdomen ovate-oblong, black dorsally. One pair of yellow triangular maculae on tergum 2 extended to anterior margin of tergum laterally. Yellow bands on terga 3 – 5 present, bands on terga 3 – 4 located on anterior portion of terga and extended to lateral margins. Anterior margin of band on tergum 3 protruded medially, posterior margin slightly concave. Yellow band on tergum 5 close to anterior margin of tergum, with posterior margin triangularly concave distinctly. Male genitalia black.



Figs 17 – 20. *Citrogramma citrinum* (Brunetti, 1923), male. 17. Lateral view of head. 18. Antenna. 19. Wing. 20. Dorsal view of abdomen.

Specimens examined. 1 ♂, Hainan, Ledong County, Mt. Jianfeng, 16 Nov. 2006, HUO Ke-Ke; 1 ♂, Hainan, Wuzhishan City, Shuiman Town, 23 – 25 May 2007, BA Yi-Bin, LANG Jun-Tong.

Distribution. China (Yunnan, Fujian, Sichuan, Hainan); Thailand, India, Malay Peninsula.

#### 1.5 *Citrogramma clarum* (Hervé-Bazin)

*Olbiosyrphus clarus* Hervé-Bazin, 1923a: 25. Type locality: Vietnam, Chapa; Hervé-Bazin, 1923b: 290; Hervé-Bazin, 1926: 67; Frey, 1946: 163.

*Syrphus clarus* (Hervé-Bazin, 1923). Curran, 1928: 198; Curran, 1931a: 313; Curran, 1931b: 350.

*Xanthogramma fasciatum* Shiraki, 1930: 410; Hull, 1949: 290; Mengual, 2012: 136.

*Xanthogramma fasciata* Shiraki, 1930. Knutson *et al.*, 1975: 320.

*Citrogramma clarum* (Hervé-Bazin, 1923). Vockeroth, 1969: 95; Knutson *et al.*, 1975: 311; Wyatt, 1991: 155, 158; Ghorpadé, 1994: 9; Mengual, 2012: 136.

Remarks. The species had not been recorded from China. Mengual (2012) synonymized *Xanthogramma fasciatum* Shiraki with *C. clarum* (Hervé-

Bazin), the former was described as new species from Taiwan by Shiraki. The authors have not studied the specimen of *Xanthogramma fasciatum* Shiraki.

Distribution. China (Taiwan); Borneo, Philippines, Vietnam, Thailand, Indonesia, Malaysia.

#### 1.6 *Citrogramma curranii* Ghorpadé (Figs 21 – 24)

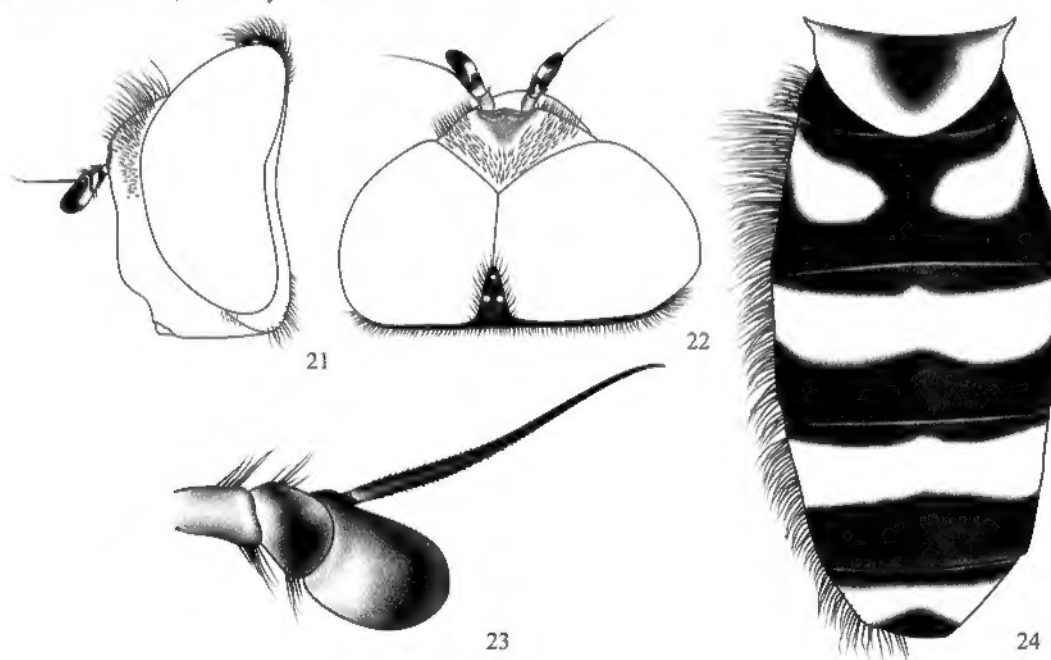
*Citrogramma curranii* Ghorpadé, 2010. Mengual, 2012: 137.

Diagnosis. Compound eyes bare, angle of frons under eyes about 90°. Frons yellow, black pilose, lunule fawn. Face yellow, yellow pilose laterally, but black pilose dorsolaterally and on the lower portion of eye orbit. Arista short pilose. Mesonotum black, broad yellow lateral margins extended from postpronotum to end of postalar callus, broad dark bluish vitta present medially. Hairs on dorsum brown yellow intermixed with black hairs posteriorly. Yellow hairs present on yellow margins and black ones on postalar callus ventrally. Scutellum yellow, black pilose, defined brownish triangular macula present medially. Pleuron black, but yellow on anterior

anepisternum, posterior 2/3 of posterior anepisternum, anterior portion and posterior-dorsal portion of katepisternum, dorso-medial portion of anepimeron, katepimeron and meron. Legs yellow, with fore, mid coxae and trochanters yellow brown. Hind leg black, but yellow brown on femur basally. Tarsi of legs black brown to black. Wing entirely microtrichose. Abdomen ovate-oblong, black dorsally. One pair of yellow triangular maculae on tergum 2 extended to anterior margin of tergum laterally. Yellow bands on terga 3 – 5 present, bands on terga 3 – 4 located on anterior portion of terga and extended to lateral margins. Anterior margin of band on terga 3 – 4 protruded medially, posterior margin slightly concave. Yellow band on tergum 5 close to anterior margin of tergum, with posterior margin triangularly concave distinctly. Male genitalia black.

Specimens examined. 3 ♂♂, Hainan, Ledong County, Mt. Jianfeng, 16 Nov. 2006, HUO Ke-Ke.

Distribution. China (Hainan); Thailand.



Figs 21 – 24. *Citrogramma curranii* Ghorpadé, 2012, male. 21. Lateral view of head. 22. Dorsal view of head. 23. Inside of antenna. 24. Dorsal view of abdomen.

#### 1.7 *Citrogramma fumipenne* (Matsumura, 1916)

*Xanthogramma fumipenne* Matsumura, 1916: 29. Type location: China (Taiwan); Horisha. Shiraki, 1930: 402, 408.

*Xanthogramma fumipennis* Matsumura, 1916: 28; Knutson *et al.*, 1975: 320.

*Citrogramma fumipenne* (Matsumura, 1916). Mengual, 2012: 142.

Remarks. Matsumura (1916) described the species *Xanthogramma fumipenne* Matsumura from China (Taiwan); Horisha. Shiraki complemented the specimens and redescribed it in 1930. Mengual (2012) transferred the species into the genus *Citrogramma*. The authors have not studied the

materials.

Distribution. China (Taiwan).

#### 1.8 *Citrogramma gedehanus* (de Meijere) (Figs 25 – 35)

*Syrphus gedehanus* de Meijere, 1914: 156. Type locality: Indonesia, Java, Gunung Gedeh; Hervé-Bazin, 1923a: 25.

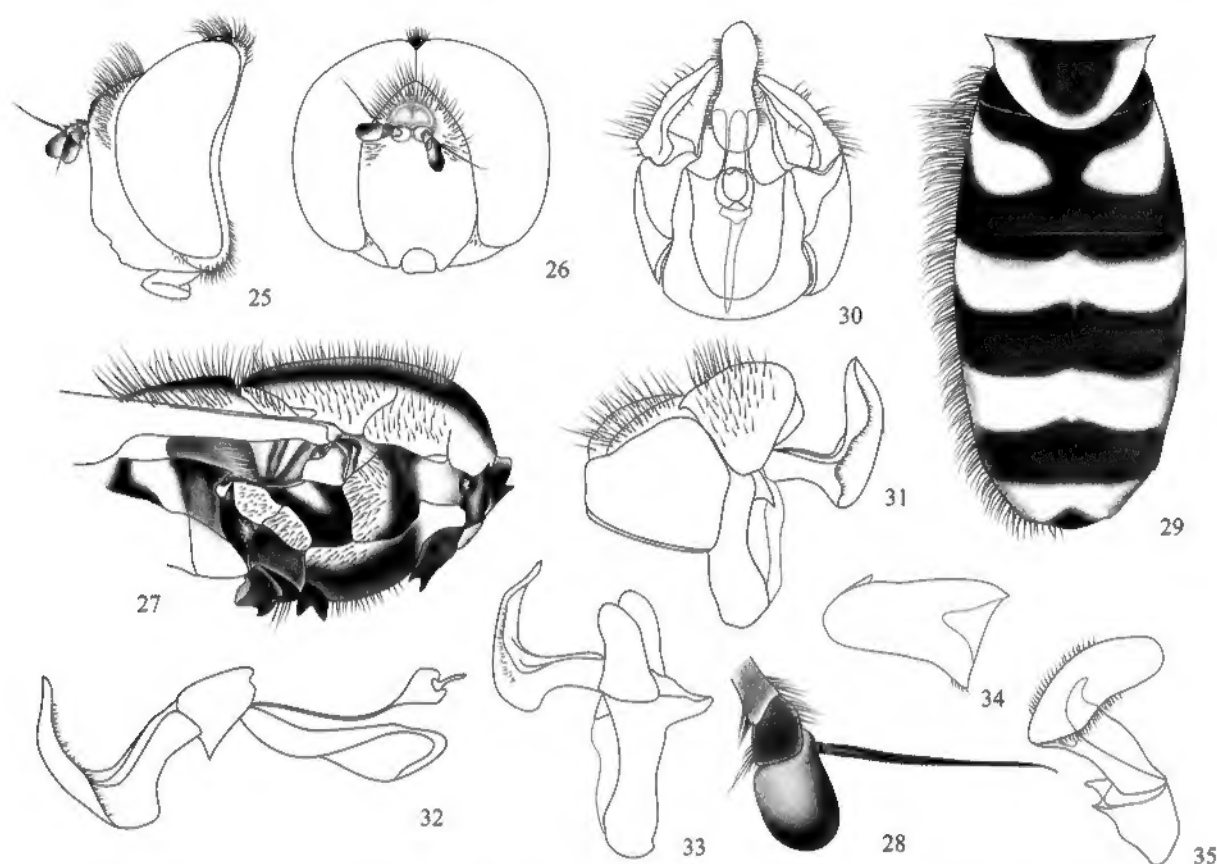
*Olbiosyrphus gedehanus* (de Meijere, 1914). Hervé-Bazin, 1926: 67; Frey, 1946: 163.

*Citrogramma gedehanus* (de Meijere, 1914). Wyatt, 1991: 155, 158.

*Citrogramma gedehanus* (de Meijere, 1914). Knutson *et al.*, 1975: 311; Mengual, 2012: 143.

Diagnosis. Compound eye bare, angle of frons





Figs 25 – 35. *Citrogramma gedehani* (de Meijere, 1914), male. 25. Lateral view of head. 26. Frontal view of head. 27. Lateral view of thorax. 28. Inside view of antenna. 29. Dorsal view of abdomen. 30. Ventral view of genitalia. 31. Lateral view of genitalia. 32. Aedeagus. 33. Lateral view of hypandrium and appendages. 34. Supper lobe. 35. Posterolateral view of apical end of aedeagus.

under eyes about  $90^\circ$ . Frons yellow, black pilose, lunule fawny. Face yellow, yellow pilose laterally, but black pilose dorsolaterally and on lower end of eye orbit. Arista short hairy. Mesonotum black, broad yellow lateral margins extended from postpronotum to posterior end of postalar callus, dark bluish medial stripe present. Hairs on dorsum brown yellow intermixed with black hairs posteriorly. Yellow hairs present on yellow margins and black ones on postalar callu ventrally. Scutellum yellow, black pilose, defined brown triangular macula present medially. Pleuron black, but yellow on anterior anepisternum, posterior  $2/3$  of posterior anepisternum, anterior portion and postero-dorsal portion of katapisternum, dorso-medial portion of anepimeron, katapisternum and meron. Legs yellow. Hind leg black, but yellow brown on femur basally. Tarsi of legs black brown to black. Wing entirely microtrichose. Abdomen ovate-oblong, black dorsally. One pair of yellow triangular spots on tergum 2 extended to anterior margin of tergum laterally. Yellow bands on terga 3 – 5 present, bands on terga 3 – 4 located on anterior portion of terga and extended to lateral margins. Anterior margin of band on terga 3 – 4 protruded medially, posterior

margin slightly concave. Yellow band on tergum 5 close to anterior margin of tergum, with posterior margin triangularly concave distinctly. Male genitalia black brown. Cercus yellow, yellow pilose. Surstylus broadly triangular, black pilose on outer surface. Hypandrium narrow, transparently membranous posteroventrally. Supper lobe strip-shaped in lateral view, broadly round posteriorly, with dentate projections on dorsal inside posteriorly. Apical of aedeagus transparent, membranous, expanded dorsally and ventrally, with fine white hairs on lateral margins. Basal aedeagus has two dentations anteroventrally.

Specimens examined. 5 ♂♂, Hainan, Ledong County, Mt. Jianfeng, 16 Nov. 2006, HUO Ke-Ke.

Distribution. China (Hainan); Java, Sumatra.

### 1.9 *Citrogramma matsumurai* Mengual

*Xanthogramma fumipenne* sensu Shiraki, 1930 (in part): 402, 408.

*Citrogramma matsumurai* Mengual, 2012: 151. Type locality: China (Taiwan: Nantou Hsien, Puli).

Remarks. In 1930 Shiraki supplied the specimens and redescribed the species *Xanthogramma fumipenne* Matsumura described from Taiwan. Mengual re-examined these specimens and found that parts of

Shiraki's specimens were not the real species *X. fumipenne*. He erected the new species *Citrogramma matsumurai* based on those materials. The author has not studied the materials.

Distribution. China (Taiwan); New Guinea.

#### 1.10 *Citrogramma shirakii* Mengual, 2012

*Xanthogramma fumipenne* sensu Shiraki, 1930 (in part); 402, 408. *Citrogramma shirakii* Mengual, 2012; 163. Type locality: China (Taiwan; Hualien County, Hualien City).

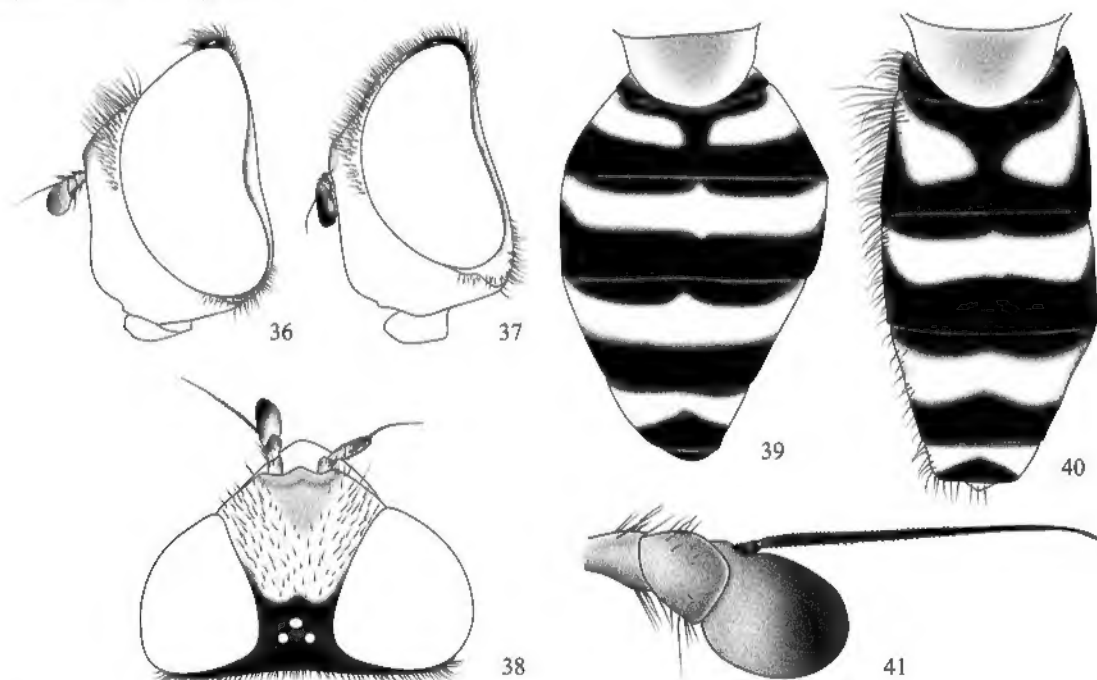
Remarks. In 1930 Shiraki supplied the specimens and re-described the species *Xanthogramma fumipenne* Matsumura described from Taiwan. Mengual re-examined these specimens and found that parts of Shiraki's specimens were not the real species *X. fumipenne*. He erected the new species *Citrogramma shirakii*. The authors have not studied the materials.

Distribution. China (Taiwan).

#### 1.11 *Citrogramma xizangensis* sp. nov.

Detailed information showed below in description of new species.

### 2 Description of New Species



Figs 36–41. *Citrogramma xizangensis* sp. nov. 36, 40–41. Male. 37–39. Female. 36–37. Lateral view of head. 38. Dorsal view of head. 39–40. Dorsal view abdomen. 41. Antenna.

Mesonotum black slightly tinged with brown, with broad yellow margins laterally and dark bluish vitta medially. Hairs on dorsum brown yellow, except for yellow hairs on yellow lateral vittae and black ones on postalar callus ventrally. Scutellum yellow with an undefined brown triangular macula medially; black pilose, hairs on posterior margin longer and thicker particularly. Subscutellar fringe black, hairs of fringe longer and thicker basolaterally, more fine and sparse

#### *Citrogramma xizangensis* sp. nov. (Figs 36–41)

Male. Compound eye bare, eye contiguity longer than height of frons; angle of frons under eyes about 90°. Vertex black, black pilose, ocellar triangle equilateral. Frons yellow, covered with yellow pollen and black hair. Lunule orange. In lateral view face protruded on lower half, with oral apex more prominent than antennal base. Facial tubercle bulged, exceeding oral apex and antennal base. Face yellow, yellow pilose laterally, but black pilose dorsolaterally and on lower end of eye orbit. Gena slightly tinged with orange, yellow pilose. Occiput black, with yellowish white pollen concealing ground color, yellow pilose. Antenna yellow brown, with basal two segments with black hairs dorsally and ventrally. Basoflagellomere slightly longer than its width, with apex obtusely rounded, mostly black brown, but yellow brown basally and ventrally. Arista black, short pilose.

medially. Pleuron yellow, except brownish on anterior 1/3 of posterior antepisternum, black on katepisternum ventrally and meron, light pollinose. Pleuron yellow pilose, with upper and lower hairy patches of posterior katepisternum almost connected, meron bare. Metasternum yellow, concolor long polise.

Legs yellow. Mid coxa slightly brown yellow. fore and mid femur brownish apicodorsally, hind

femur black to black brown on less than 1/2 apically. Tarsi black. Fore and mid legs mainly yellow pilose, fore femur with a row of long black hairs posterioventrally and short black hairs apicodorsally, fore tibia and tarsus black pilose dorsally. Pilosity on mid leg similar to fore leg, but femur with long black hairs on posterior 2/3 ventrally. Pile on hind leg black, except coxa and trochanter and basal femur yellow pilose. Hairs absent on apical posteromedial angle of hind coxa.

Wing hyaline, except for dark subcostal cell, entirely microtrichous. Calypteres yellow, upper calypter and calyptral fringe black, lower calypter dark brown on inside and its margin, hairs of fringe long, dark brown. Halter yellow.

Abdomen long oval, terga 3 - 4 weakly marginate. Terga black. One pair of yellow triangular maculae on tergum 2 extended to anterior margin of tergum laterally. Yellow bands on terga 3 - 5 present, bands on terga 3 - 4 located on anterior portion of terga and extended to lateral margins. Anterior margin of bands on terga 3 - 4 protruded medially, posterior margin slightly concave except for band on tergum 3 with posterior margin slightly protruding medially. Yellow band on tergum 5 close to anterior margin of tergum, with posterior margin triangularly concave distinctly. Hairs on dorsum black except for yellow hairs on tergum 1 - 2 basally. Venter yellow with long black pile except for yellow hairs on sternite 1 - 2 basally. Male genitalia yellow.

Female. Frons mostly yellow, except narrow black in front of anterior ocellus extending forwards along eye margin. Mesonotum mainly black pilose on posterior portion. Abdomen broadly oval; yellow maculae on tergum 2 and bands on terga 3 - 5 yellow, narrower than in male. The rest similar to male.

Body length: ♂ 10 mm, ♀ 11 mm; wing length: ♂ 8 mm, ♀ 9 mm.

Holotype 1 ♂, Xizang, Linzhi County (30° N, 94°54' E; alt. 2 545 m), 26 Sep. 2008, PAN Zhao-Hui. Paratypes: 1 ♀, same data as holotype; 1 ♂, Xizang, Bomi County (30° 2' N, 95° 15' E; alt. 2 343 m), 24 Sep. 2008, PAN Zhao-Hui.

The new species is similar to *C. amarilla* Mengual. Both with yellow face, metasternum pilose, pleuron mostly yellow, wing hyaline with microtrichia, yellow bands on dorsum of abdomen extending to lateral margins. But the new species can be distinguished from *C. amarilla* by fore and mid legs mostly yellow pilose, fore femur of male with a row of long black hairs posterioventrally, tergum 2 of female with a pair of narrow yellow maculae; the latter with fore and mid legs of male mostly black pilose except yellow pilose basally, tergum 2 of female with yellow band.

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## 中国裸眼蚜蝇属研究 (双翅目, 蚜蝇科)

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**摘要** 记录中国裸眼蚜蝇属 *Citrogramma* 11 种 (包括 1 新种)。文中给出黄色裸眼蚜蝇 *C. amarilla*、阿里山裸眼蚜蝇 *C. arisanicum*、黑腿裸眼蚜蝇 *C. citrinoides*、柑桔裸眼蚜蝇 *C. citrinum*、卡氏裸眼蚜蝇 *C. curranii*、吉德裸眼蚜蝇 *C. gedeharum* 及新种西藏裸眼蚜蝇 *Citrogramma xizangensis* sp. nov. 等种的异名录、形态描述、特征图及分布, 研究标本保存于陕西理工学院动植物标本馆。清丽裸眼蚜蝇 *C. clarum*、褐翅裸眼蚜蝇 *C. fumipenne*、松村裸眼蚜蝇 *C. matsumurai*、素木裸眼蚜蝇 *C. shirakii* 等作者未见标本, 文中仅列出异名录及分布。

西藏裸眼蚜蝇, 新种 *Citrogramma xizangensis* sp. nov. (图 36 ~ 41)

**关键词** 双翅目, 蚜蝇科, 裸眼蚜蝇属, 新种, 中国。

**中图分类号** Q969.44

体长: ♂ 10 mm, ♀ 11 mm; 翅长: ♂ 8 mm, ♀ 9 mm。

本种近似 *Citrogramma amarilla* Mengual, 两者颜黄色, 后胸腹板具毛, 胸部侧板黄色, 翅透明, 翅膜具微刺, 腹部黄色带伸达背板侧缘, 但新种雄性前足腿节后腹侧具 1 列黑色长毛, 后者前、中足腿节主要具黑毛, 仅基部具黄毛; 新种雌性第 2 背板具 1 对狭长黄斑, 后者第 2 背板具横带。

正模 1 ♂, 西藏林芝, 2008-09-26, 潘朝晖采。副模: 1 ♀, 西藏林芝, 2008-09-26, 潘朝晖采; 1 ♂, 西藏林芝, 2008-09-24, 潘朝晖采。

词源: 新种种名源自模式产地。